

BUFFERED MEMORY MODULE WITH IMPLICIT TO EXPLICIT MEMORY COMMAND EXPANSION

5

ABSTRACT OF THE DISCLOSURE

Method and apparatus for use with buffered memory modules are included among the
embodiments. In exemplary systems, the memory module has a buffer that receives memory
commands and data, and then presents those commands and data to physical memory devices
through a separate interface. The buffer has the capability to accept an implicit memory
10 command, i.e., a command that does not contain a fully-formed memory device command,
but instead instructs the memory module buffer to form one or more fully-formed memory
device commands to perform memory operations. Substantial memory channel bandwidth
can be saved, for instance, with a command that instructs a memory module to clear a region
of memory or copy a region to a second area in memory. Other embodiments are described
15 and claimed.